## **Recovery Plan Action Status**

Plan Name: Furbish Lousewort Plan Status: Final Revision 1

Plan Date: 02-Jul-91 Lead Agency: USFWS

Lead Office Maine Ecological Services Field Office 866-3344)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Furbish lousewort (Pedicularis furbishiae)	1	1.11	Develop educational programs for presentation to communities, coordinate a river watch program, and institute school participation in river ecosystem conservation	Ongoing Current	Prior to FY 1995		State Agency, State Planning Office	Other: Information and Education	Contract, Internal Technical Assistance, Species Expert	plus \$5,000/yr for FY 4-6. Educational programs (video, posters, brochures) have been developed by the Maine Natural Areas Program, St. John River Land Trust, and University of Maine at Fort Kent. Riverfront kiosks and other outreach programs are planned for the future.
Furbish lousewort (Pedicularis furbishiae)	1	1.12	Maintain landowner contacts to promote voluntary protection agreements for essential habitat.	Ongoing Current	FY 2005	FY 2007	State Agency	Acquisition: Other, Management: Land Use, Other: Information and Education	Contract, Species Expert	plus \$5,000/yr for FY 4-6. Recent initiative to reach all landowners was started in 2005 by Maine Natural Areas Program with a contract to the Northern Maine Community Foundation and St. John River Landtrust. A landowner database was created and landowners were contacted. Several expressed interest in easements and management agreements.

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Furbish lousewort (Pedicularis furbishiae)	2	1.2	Determine essential habitat in all river sections.	Complete	FY 1995 - FY 1999		U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement, State Agency, State Planning Office	Habitat	Internal Technical Assistance, Species Expert	plus \$2,000 more in FY 4. Active, potential, and suitable lousewort habitat was mapped using GIS by the Maine Natural Areas Program using survey data collected from 1989-1997. A few new populations have been discovered since in upper reaches of the St. John River. Current location information is maintained by the Maine Natural Areas Program in the Natural Heritage database.

Furbish lousewort 2 1.31 Encourage the Partially Complete FY 1995 - FY 1999 State Agency, Management: Internal	Maine has had a
(Pedicularis   development of an   State Planning   Planning   Other:   Administration	Technical system since the

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										international bridge in Fort Kent, those waters lying within the State, including all impoundments - Class A.
										(3) From the international bridge in Fort Kent to the international bridge in Madawaska, those waters lying within the State, including all impoundments - Class B.
										The last revisions to river classifications were made in 1999.
Furbish lousewort (Pedicularis furbishiae)	2	1.32	Encourage the development of an amendment to the Mandatory Shoreland Zoning Act that would provide enhanced protection for Furbish lousewort essential habitat.	Ongoing Current	FY 1995 - FY 1999		State Agency, State Planning Office	Management: Habitat Maintenance and Manipulation, Management: Land Use, Management: Planning, Other: Regulations	Internal Field Assistance, Species Expert	Other responsible parties include Maine Natural Areas Program and the municipalities of Fort Kent, St. Francis, Van Buren, Allagash and other towns. All organized towns with Furbish's lousewort have Shoreland Zoning Plans in place, which require a 250 foot resource protection zone adjacent to large rivers, special habitats, 100-year floodplains, and river banks with high erosion potential - all of which apply to lousewort habitat. A new initiative, Beginning With Habitat, provides towns with lousewort occurrence data and will provide guidance for future ordinances to protect habitat.

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Furbish lousewort (Pedicularis furbishiae)	2	1.33	Encourage the development of comprehensive State plant protection legislation. Currently, Maine does not have such legislation. A coordinated effort among public agencies and private conservation groups will be undertaken to develop legal State protection and enhanced Federal protection for threatened and endangered plants, including the Furbish lousewort.	Not Started			State Agency, State Planning Office	Other: Regulations	Internal Administrative, Species Expert	Other responsible parties include the Maine Natural Areas Program. Rare and endangered plant legislation is not being considered byt the Maine Legislature at this time.

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Furbish lousewort (Pedicularis furbishiae)	1	1.41	Atempt to secure title or conservation easements for at least 50% of the essential habitat within each of the four river sections (see Table 5). Encourage acquisition through purchase or gift to private or public conservation agencies from willing landowners. Where appropriate, set up protective management agreements or develop applicable deed restrictions.	Ongoing Current	FY 2000 - FY 2004		State Agency, State Planning Office	Acquisition: Easement, Acquisition: Fee Title	Internal Administrative, Internal Technical Assistance, Species Expert	plus \$8,000/yr for FY 4-6. Includes cost of easements on 70-100 acres of habitat. Other responsible parties include the Maine Natural Areas Program, St. John River Land Trust, Maine Chapter of The Nature Conservancy, and Northern Maine Development Corporation. Approximately 4.8 of 18.85 miles of active and potential habitat are protected (25%). Habitat protection was initiated by TNC in 2000, but has occurred only in area upriver from Allagash. The Maine Natural Areas Program received federal Landowner Incentive Program funds in 2004 to develop protection strategies for habitat in the lower reaches of the river.

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Furbish lousewort (Pedicularis furbishiae)		1.42	Encourage the establishment of local land trusts to coordinate and administrate easements, agreements, and deed restrictions.	Partially Complete	FY 2000 - FY 2004		State Agency, State Planning Office	Management: Land Use	Internal Technical Assistance	plus \$8,000/yr for FY 4-6. Includes cost of easements on 70-100 acres of habitat. Other responsible parties include the Maine Natural Areas Program, Maine Chapter of The Nature Conservancy. The Upper St. John River Land Trust has been active since 1991. It is small, but active. The land trust received contract support from a 2004 Landowner Incentive Program grant to encourage their involvement in actively protecting lousewort habitat.
Furbish lousewort (Pedicularis furbishiae)	2	2	Monitor population and habitat conditions.	Not Started			U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement, State Agency, State Planning Office	Work type not yet selected	Labor type not yet selected	plus \$5,000 more in FY 5
Furbish lousewort (Pedicularis furbishiae)	3	3.1	Coordinate with ME Department of Environmental Protection to monitor the effectiveness of shoreland zoning in protecting Fubish lousewort essential habitat.				State Agency, State Planning Office	Work type not yet selected	Labor type not yet selected	Other responsible parties include the Maine Department of Environmental Protection and Maine Natural Areas Program. Tied to recovery action 1.32.

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Furbish lousewort (Pedicularis furbishiae)		3.2	Coordinate with Maine Land Use Regulation Commission (LURC) with the revision, renewal, and implementation of the St. John River Resource Protection Plan.	Complete	FY 2000 - FY 2004		State Agency, State Planning Office	Management: Land Use, Management: Planning	Internal Administrative, Species Expert	Other responsible parties include the Maine Natural Areas Program and the Maine Land Use Regulation Commission. The St. John River Resource Protection Plan was last updated in 2002. Most Lousewort locations are protected voluntarily by landowners through the Critical Areas Register and/or the St. John River Resource Protection Plan, proposed by landowners and approved by the Commission. The Resource Plan, designed to safeguard the natural values and traditional uses of the St. John River, prohibits commercial and residential development, subdivisions, dams, and utility projects. The Plan allows management for non-intensive recreational use, as well as timber harvesting in accordance with prescribed standards that include protection of the rare plant resource.

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Furbish lousewort (Pedicularis furbishiae)	2	3.3	Coordinate with Maine Office of Comprehensive Planning to incorporate protective measures in town plans and ordinances.	Ongoing Current	FY 2005		State Agency, State Planning Office	Management: Land Use, Management: Planning	Internal Administrative, Internal Technical Assistance	Other responsible parties include the Maine Natural Areas Program and the Maine State Planning Office (formerly Maine Office of Comprehensive Planning). The MNAP provides the organized towns with information on Furbish lousewort occurrences through the Beginning with Habitat program. This information will ultimately be incorporated into town comprehensive plans and associated ordinances.
Furbish lousewort (Pedicularis furbishiae)	3	3.4	Coordinate with Federal regulatory agencies to ensure the continuation of present-day dynamics of the St. John River ecosystem within the Furbish lousewort's range.	Ongoing Current	Prior to FY 1995		U.S. Federal Energy Regulatory Commission, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement	Management: Planning, Other: Regulations	Internal Administrative, Internal Technical Assistance	Other responsible parties include the Maine Natural Areas Program. The U. S. Fish and Wildlife Service continues to review all federal projects in the St. John River watershed under Section 7 of the ESA.
Furbish lousewort (Pedicularis furbishiae)	2	3.5	Maintain international cooperation.	Not Started			U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement, State Agency, State Planning Office	Management: Land Use, Management: Planning, Other: Regulations	Labor type not yet selected	Other responsible parties inloude the Maine Natural Areas Program, which communicates regulatory with its counterpart New Brunswick Natural Heritage Program. There are a few small populations of lousewort in New Brunswick.

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Furbish lousewort (Pedicularis furbishiae)	3	4.1	Determine the possible correlation between current land use practices and hydrologic responses of the upper St. John River.	Not Started			State Agency, State Planning Office	Research: Habitat Requirements, Research: Habitat Status	Contract, Graduate Student	plus \$1,500 in FY 4 Other responsible parties include the Maine Natural Areas Program. These studies have not been initiated.
Furbish lousewort (Pedicularis furbishiae)	3	4.2	Determine the correlation of land use in the St. John River corridor to lousewort distribution and abundance.	Partially Complete	FY 2000 - FY 2004		State Agency, State Planning Office	Management: Land Use, Research: Habitat Requirements, Research: Habitat Status	Contract, Graduate Student, Species Expert	Some of the GIS groundwork has been completed in 2000. Final analysis of land use and lousewort distribution has yet to be completed.
Furbish lousewort (Pedicularis furbishiae)	3	4.3	Assess recreational impact on habitat.	Not Started			State Agency, State Planning Office	Work type not yet selected	Labor type not yet selected	
Furbish lousewort (Pedicularis furbishiae)	2	5	Study the recolonization processes.	Not Started			State Agency, State Planning Office	Research: Habitat Requirements, Research: Habitat Status, Research: Management Techniques	Contract, Graduate Student, Species Expert	
Furbish lousewort (Pedicularis furbishiae)	2	6.1	Manage succession at specific sites, as needed.	Not Started			U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement, State Agency, State Planning Office	Management: Habitat Maintenance and Manipulation, Research: Habitat Requirements	Contract, Graduate Student, Species Expert	plus \$2,000/yr for FY 4-6. Responsible party is the Maine Natural Areas Program.
Furbish lousewort (Pedicularis furbishiae)	2	6.2	Manage public use of river banks.	Ongoing Current			State Agency, State Planning Office	Management: Habitat Maintenance and Manipulation, Management: Land Use	Contract, Internal Technical Assistance, Species Expert	plus \$2,000/yr for FY 4-6 Responsible party is the Maine Natural Areas Program, St. John River Land Trust, municipalities, landowners.
Furbish lousewort (Pedicularis furbishiae)	3	7	Establish and manage additional populations, as warranted.	Not Started			U.S. Fish and Wildlife Service - Fish and Wildlife Enhancement, State Agency, State Planning Office	Management: Propagation, Management: Reintroduction, Research: Management Techniques, Research: Propagation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	plus \$2,000/yr for FY 4-6. Thus far, propagation and reintroduction has not been necessary to achieve recovery.